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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/750,261

12/31/2003

Steve S.K. Chou

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EXAMINER

ORR, HENRY W

ART UNIT

PAPER NUMBER

2176

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/750,261	<b>Applicant(s)</b> CHOU, STEVE S.K.	
	<b>Examiner</b> Henry Orr	<b>Art Unit</b> 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,7-9 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 7-9 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is responsive to applicant's amendment dated 12/29/2008.
2. Claims 1, 3, 4, 7-9 and 15 are pending in the case.
3. Claims 2, 5, 6, 10-14 and 16-20 are cancelled.
4. Claims 1, 8 and 15 are independent claims.

### **Applicant's Response**

5. In Applicant's response dated 12/29/2008, applicant has amended the following:
  - a) Claims 1, 8 and 15

Based on Applicant's amendments and remarks, the following objections and rejections previously set forth in Office Action dated 11/12/2008 are withdrawn:

- a) 35 U.S.C. 112 2<sup>nd</sup> to Rejection to claims 8 and 9

### ***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the recited "*computer-readable medium*" of Claim 15. The Specification does not mention the recited "*computer-readable medium*." Thus, there is no support or antecedent basis for the recited "*computer-readable medium*" that allows the meaning of the term to be ascertained, as required in 37 CFR 1.75(d)(1).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1, 3, 4, 7, 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over User Guide PocketCAD PRO Version 4.0 (hereinafter “PocketCAD”) running on a general mobile device, May 2001 of record in view of Christensen, U.S. Patent No. 4,663,616 A.**

Claim 1:

PocketCAD teaches **a system for entry and display of blueprint data comprising a handheld device, said handheld device further comprising:**

PocketCAD teaches **a system for entry and display of blueprint data comprising a handheld device, said handheld device further comprising:** (see Introduction p. 9-10)

**a graphical user interface for providing line segment data entry fields, (see Drawing Lines p. 48-54) arc data fields comprising a start point field (e.g. center point field), an end point field (e.g. end point field), and a radius field (e.g. start point field) (see Arc with Center tool p. 55, Arcs p.87) and for displaying input line segments and arc data (see Polyline tool p. 51-53);**

PocketCAD teaches a mobile device capable of having a processor and memory adapted for accepting one at a time, storing, and editing line segment and arc data

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associated with said input line segments (see System Specifications p. 10, User Interface Features p. 10-11, Using CadExchange p. 15-17, Polyline tool p. 51-53-e.g. adding a line one at a time to create a polyline object. ). **(claim 1; i.e., a processor and memory adapted for accepting one at a time, storing, and editing line segment and arc data associated with said input line segments)**

Pocket CAD teaches a Object Properties Dialog window for polylines capable of automatically updating the segmentation of a previously placed arc created by a polyline into at least two distinct arc segment (see Polylines p. 90). **(claim 1; i.e., said editing of said arc data further comprising an arc segmenter for automatically segmenting a previously placed arc into at least two distinct arc segments.)**

Although, PocketCAD fails to explicitly recite the phrase “hierarchical sequence”, PocketCAD does suggest adding and storing line segments one at a time in a hierachical sequence. Examiner submits that the PocketCAD application allows the user to add lines one at a time in a “hierarchical sequence”. For instance, a user creating a polyline must add a line to an existing line (see Polyline tool p. 51-53). Thus, each line that is added to the existing polyline object is done so in a “hierarchical sequence”. Examiner submits that the storing of the line objects may be determined by the order in which the lines are added to the polyline object. Therefore, since a polyline object can be created in a hierarchical sequence by adding lines one at a time, PocketPad must teach or suggest storing in a hierarchical sequence one line at a time. **(claim 1; i.e., and wherein said input line segments are stored as a hierarchical sequence according to said accepting one at a time,)**

PocketPAD fails to expressly teach **wherein editing, insertion, or deletion of a selected line segment, identically translate line segments that succeed the selected line segment of said hierarchical sequence without translating line segments that precede the selected line segment in said hierarchical sequence.**

However, Christensen teaches assigning a “sticky attribute” to a line segment so that when that line segment is moved; the lines that are attached to the “sticky” line segment will also move (see abstract, col. 1 lines 58-66). In other words, Christensen teaches the capability to edit a “sticky” line segment that will translate the succeeding line segment of a hierarchical sequence without translating line segments that precede the selected “sticky” line segment in said hierarchical sequence because the “sticky attribute” can be assigned to one end of a line segment (e.g. the end attached to the succeeding lines) (see col. 6 lines 1-14). Therefore, closing a gap (i.e., editing) involving “sticky” line segment would automatically translate the attached succeeding lines.

**(claim 1; i.e., and wherein editing, insertion, or deletion of a selected line segment identically translate line segments that succeed the selected line segment of said hierarchical sequence without translating line segments that precede the selected line segment in said hierarchical sequence. )**

In response to the newly amended limitation “identically translate”, Examiner interprets the attached succeeding lines (i.e., succeeding line segments) of the “sticky” line segment that are translated to be “identically translated” because each succeeding line segment is moved from one place to another.

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It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the editing capabilities for line segments as taught by PocketPAD to include a "sticky attribute" for line segments as taught by Christensen to provide the benefit of avoiding repetitious editing and revision procedures (see Christensen; col. 1 lines 18-24).

Claim 3:

PocketPAD teaches **wherein said line segment data entry fields comprise a start point field, a direction field, and a length field** (e.g. distance field) (see Drawing Lines p. 48-51).

Claim 4:

PocketPAD teaches **said display is a touch-screen** (see Place, Move, and Lift p. 19).

Claim 7:

PocketPAD teaches **further comprising a keypad** (see Setting the Keyboard or Pen p. 22).

Claim 8:

PocketPAD teaches **a method for entering blueprint data into a handheld device comprising: entering a start point for a first line segment;**

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**entering a length for said first line segment;**

**entering a direction for said first line segment;**

**entering a start point for an arc;**

**entering a radius for said arc;**

**entering a displaying said line segment and said arc on a display associated with said handheld device;** (see Introduction p. 9-10, Drawing Lines p. 48-54, Arc with Center tool p. 55, Arcs p.87, Polyline tool p. 51-53 )

PocketCAD teaches a Object Properties Dialog window for polylines capable of automatically updating the segmentation of a previously placed arc created by a polyline into at least two distinct arc segment (see Polylines p. 90). **(claim 8; i.e., providing a segment editor to automatically parse said arc into a plurality of arc subdivisions;)**

PocketCAD teaches creating a polyline with multiple line segments (see Polyline tool p. 51-53). **(claim 8; i.e., entering a start point for a second line segment, wherein said start point of said second line segment is an end point of said first line segment; entering and displaying said second line segment on said display; entering a start point for a third line segment, wherein said start point of said third line segment is an end point of said second line segment;)**

PocketCAD teaches moving (i.e., translating) entities such as line segments (see p. Moving entities pgs. 76-77). **(claim 8; i.e., translating said second line segment so that the start point of said second line segment coincides with an end point of said third line segment;)**



As explained in claim 1, PocketCAD fails to explicitly recite the phrase “hierarchical sequence”; however, PocketCAD does suggest adding and storing line segments one at a time in a hierarchical sequence. Therefore, Examiner relies on the rationale set forth in claim 1 regarding this limitation. **(claim 8; i.e., storing said first, second, and third line segments as a hierarchical sequence)**

PocketPAD fails to expressly teach wherein editing, or deletion of said second line segment automatically translates said third line segment without translating said first line segment.

However, Christensen teaches wherein editing a “sticky” line segment automatically translates a succeeding attached line segments without translating a preceding line segment (see col. 6 lines 1-14). **(claim 8; i.e., and wherein editing, or deletion of said second line segment automatically identically translates said third line segment without translating said first line segment.)**

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the editing capabilities for line segments as taught by PocketPAD to include a “sticky attribute” for line segments as taught by Christensen to provide the benefit of avoiding repetitious editing and revision procedures (see Christensen; col. 1 lines 18-24).

In response to the newly amended limitation “identically translate”, Examiner interprets the attached succeeding lines (i.e., succeeding line segments) of the “sticky”

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line segment that are translated to be “identically translated” because each succeeding line segment is moved from one place to another.

Examiner notes that the phrase “identically translates” is referring to only one line segment (i.e., third line segment). Examiner interprets the phrase to require at least two segments being translated. In other words, the third segment cannot be identically translated to itself. Therefore, when the claim recites only one segment (i.e., third line segment) to be translated, the meaning of the phrase “identically translate” becomes unclear.

Claim 15:

Claim 15 includes a program embodied on a computer readable medium to implement the steps that are substantially encompassed in system claim 1; therefore the claim is rejected under the same rationale as system claim 1 above.

**8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over by PocketPAD in view of Christensen as cited above, in further view of Minakata, U.S. Patent No. 5,568,565 B1.**

Claim 9:

Both PocketPAD and Christensen failed to expressly teach a repeat factor.

However, Minakata teaches “*Repetition factor  $R_f$  is a parameter which shows whether the user intends to repeatedly write line segments*” (see col. 5 lines 26-27).  
**(claim 9; i.e., further comprising entering a repeat factor for said line segment.)**

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Examiner interprets the repetition factor as equivalent to the repeat factor because the both the repetition factor and repeat factor indicate how many times the line segments should be repeated.

It would have been obvious to one of ordinary skill in the art at the time the invention to modify polyline interface as taught by PocketPAD in view of Christensen to include a repetition factor as taught by Minakata to provide benefit of allowing the user to repeatedly, yet efficiently write line segments (see Minakata; col. 5 lines 26-31).

### ***Response to Arguments***

9. Applicant's arguments filed 12/29/2008 have been fully considered but they are not persuasive.

### **Rejections under 35 U.S.C. §103(a)**

#### **Claims 1, 3, 4, 7, 8 and 15**

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the suggestion to

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combine the references is found in the Christensen (see col. 1 lines 18-24- avoiding repetitious editing and revision procedures in CAD systems).

Applicant argues that Christensen is not capable of “identically translating” line segments. Its sticky attribute pulls lines without identically translating the lines (see Response p. 12).

Examiner respectfully disagrees.

Examiner notes that the instant application does not define the term “translate” or the phrase “identically translate”. Examiner interprets the term “translate” to mean “to move from one place to another” and the phrase “identically translate” to describe at least two line segments moving from one place to another. In light of Christensen, Examiner interprets the attached succeeding lines (i.e., plurality of succeeding line segments) of the “sticky” line segment that are translated to be “identically translated” because each succeeding line segment is moved from one place to another. Therefore, Christensen is capable of “identically translating” line segments.

### **Claim 9**

Applicant arguments with respect to claim 9 are substantially encompassed in the arguments under claims 1, 3, 4, 7, 8 and 15 above, therefore examiner responds with the same rationale as stated above.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Orr whose telephone number is (571) 270 1308. The examiner can normally be reached on Monday thru Friday 8 to 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on (571) 272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

3/2/2009

HO

/DOUG HUTTON/

Supervisory Patent Examiner, Art Unit 2176